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COLLEGE OF COMMERCE AND ADMINISTRATION
THE OHIO STATE UNIVERSITY

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BULLETIN OF BUSINESS RESEARCH

BUSINESS CONDITIONS SUMMARY

Industrial employment in Ohio shows improvement for the second month (See Chart I). New York state industrial employment for February showed improvement but, like Ohio, is still slightly below the conditions in February, 1926.

Bank debits for Ohio (corrected for seasonal variations) show a larger improvement than for the country (omitting New York City).

February sales of automobiles in Ohio show improvement for passenger cars and decline for commercial cars, but in both cases are below normal. A similar situation prevails in the country as a whole.

There is indication of a revival of construction in Ohio and the Pittsburgh District.

Department stores sales in the Cleveland District increased 1.6 per cent in February as compared with February, 1926, and increased 2.5 per cent in the country as a whole.

Wholesale prices were lower the first week of March than the average for February but the downward trend was checked the fourth week of February.

There was an improvement in the iron and steel trade toward the end of February and a check in the decline of prices.

A rather dull situation prevails in foreign trade and the movement of international prices is still downward.

Relatively high prices for industrial stocks indicate a rather optimistic attitude.

The current outlook is for active business and a prosperous year with little or no increase in trade above 1926 levels.

The statistical position of Ohio business is summarized in Table I.

TABLE I.
SUMMARY OF BUSINESS CONDITIONS IN THE CITIES OF OHIO
Per Cent Change from (1) Previous Month and (2) Same Month Last Year

City	Bank Debits		Construction Contracts Awarded		Construction Employment		Metal Trades Employment		Fondries & Mach. Shops Employment		Automobile Bills of Sale Filed	Other Series for State of Ohio		
	*(1)	(2)	*(1)	(2)	*(1)	(2)	(1)	(2)	(1)	(2)	(1)	Series	(1)	(2)
Akron	+6.9	− .8	−62.1	+95.6	+18.4	−28.5	—	—	—	—	−25.3	Employment:		
Canton	—	—	—	—	+14.1	−45.1	+8.9	−7.8	—	—	+12.3	Steel Works	−4.0	−8.5
Cincinnati	+1.7	−2.6	+1.1	+86.3	—	—	− .4	− .4	+2.7	−10.5	+23.6	Blast Furnaces	+3.5	−2.6
Cleveland	+6.7	+18.9	+20.5	−21.9	+11.0	+8.8	+2.5	−9.7	+7.9	+19.3	+52.6	Composite Iron and Steel	+1.2	−0.8
Columbus	−11.8	+11.9	+58.0	+28.6	+33.3	+13.3	+16.9	+6.3	+19.8	+18.0	−11.2	Composite		
Dayton	−7.0	+10.1	+125.8	+196.3	+36.0	+249.7	—	—	+1.6	−29.4	+21.7	Industrial	+4.4	−3.1
Toledo	−2.7	−5.6	+178.9	+226.4	+12.7	−35.1	+20.1	+18.2	−3.4	−21.7	—	Wholesale Grocery Sales	−2.9	−6.7
Youngstown	+11.9	+12.4	+1420.2	+60.4	+1.8	−39.1	—	—	—	—	—	Retail Dry Goods Sales	—	—
STATE	+2.4	+11.0	+21.4	+36.9	+17.1	−6.0	+11.4	+2.1	+4.4	+4.5	+3.7			

*The usual seasonal change is allowed for.

CHART I
COMPOSITE INDEX OF INDUSTRIAL EMPLOYMENT IN OHIO
Since January 1922
Average Month 1923 Equals 100

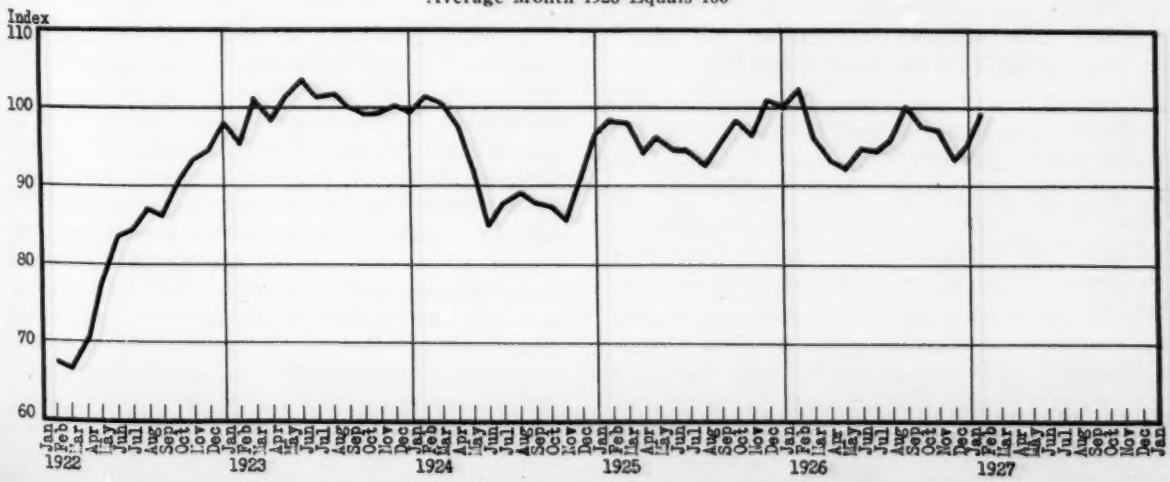
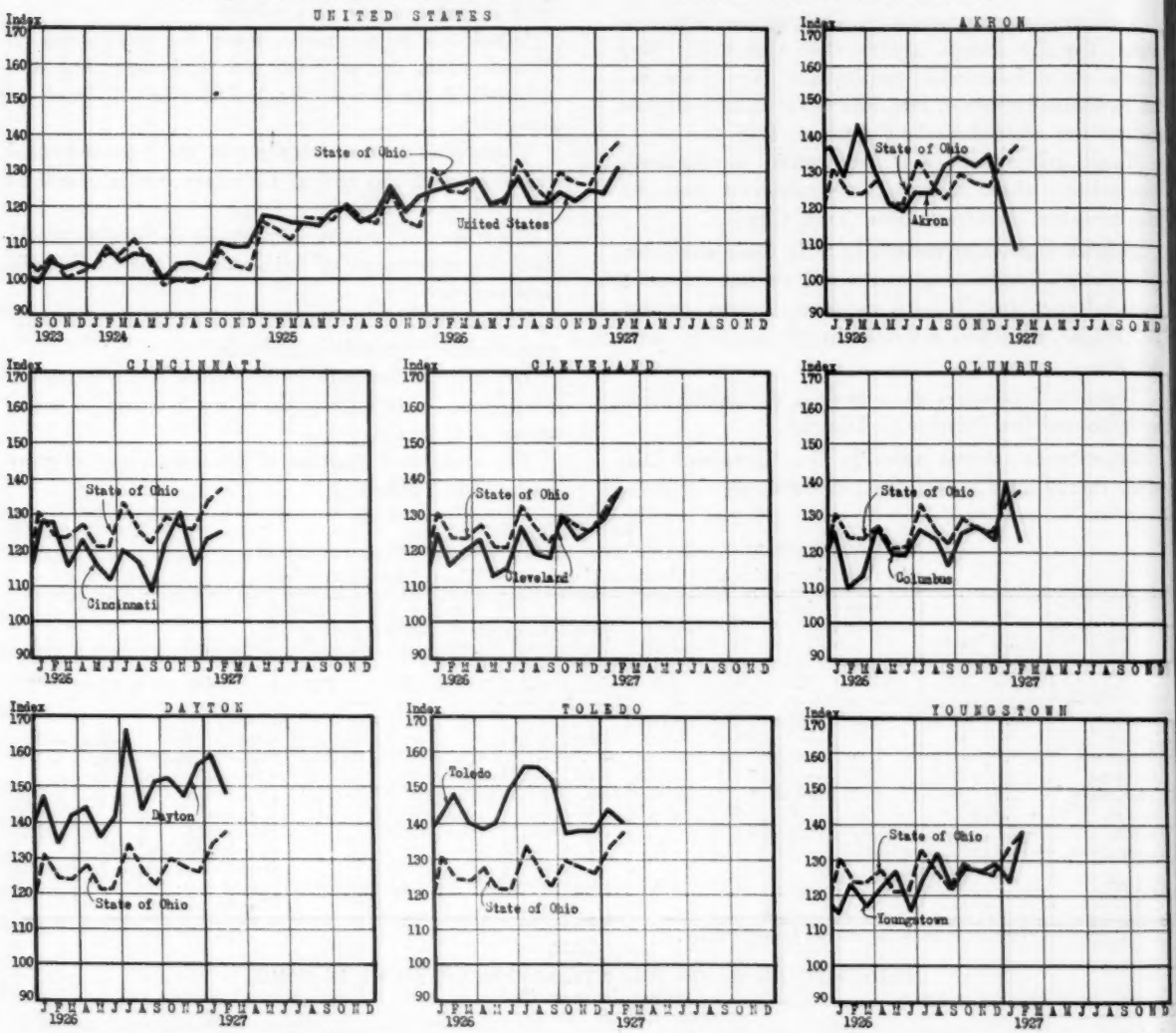


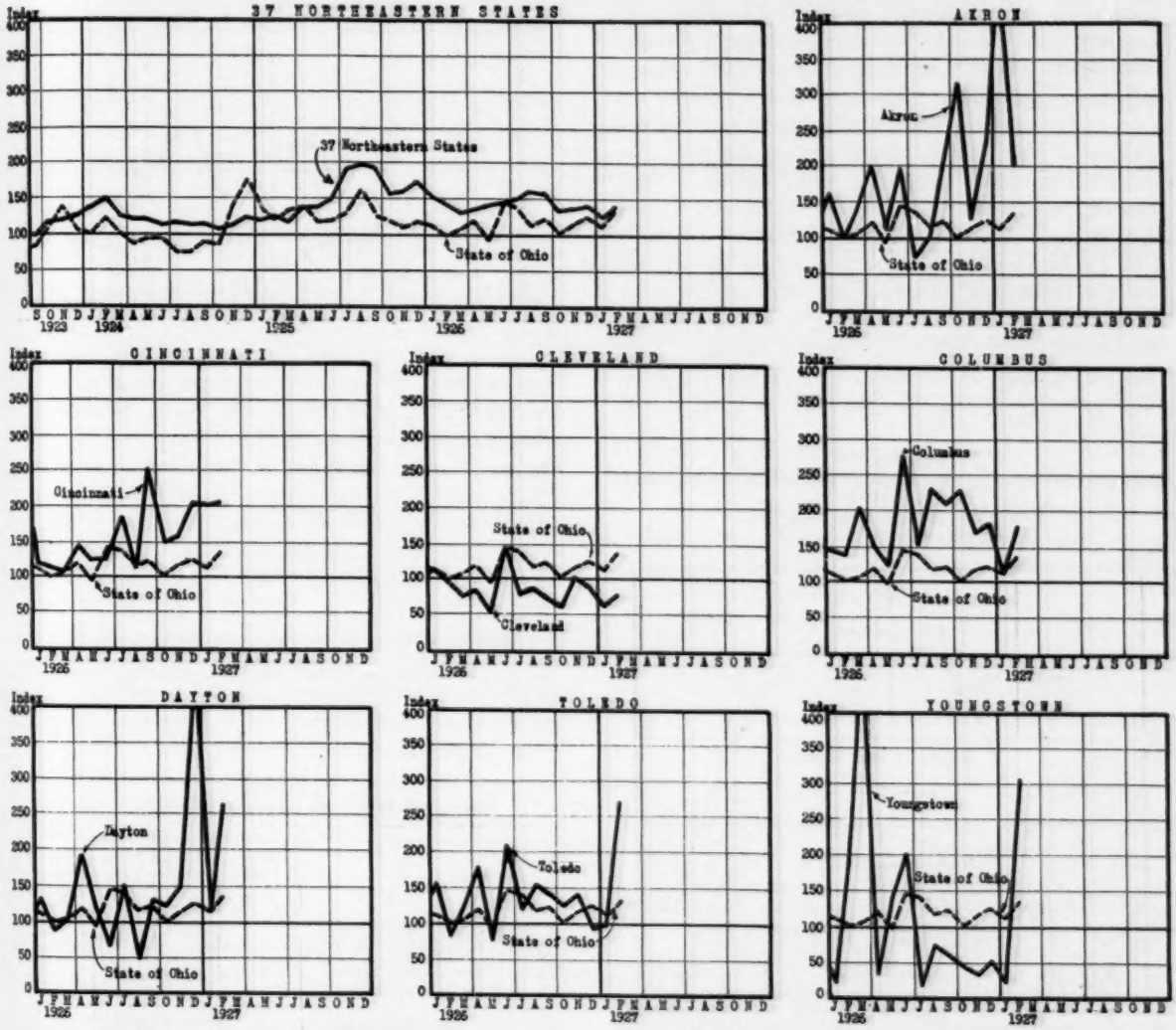
CHART II
BANK DEBITS IN OHIO CITIES
Corrected for Seasonal Variation
Average Month 1920-1924 Equals 100 Source: Federal Reserve Board.



OHIO BUSINESS CONDITIONS AS REFLECTED IN BANK DEBITS

Bank debits in Ohio in February registered a small gain over January after allowing for the usual seasonal change (See Chart II). February normally shows a 20 per cent drop from January but this year the actual drop was only 18 per cent, hence the upturn in the curve. Reference to the upper left-hand section of the above chart shows that the February level was considerably higher than that of any month in the past few years. It is interesting to note the close relationship between the Ohio curve and the bank debits curve for the entire country. This national curve represents bank debits for cities other than New York. The New York data are excluded because they indicate primarily speculative activity. This comparison of the Ohio and the national curves gives the proper perspective in studying the movements of bank debits in the individual cities. During February the movement of bank debits in the various cities was of a mixed character. Four declines were recorded as compared with three increases. The Akron chart shows a continuation of the severe decline begun in January. The decline in Columbus was also considerable. The most important increase occurred in Youngstown. The Ohio curve can be used in each individual case as a basis of comparison. Such mixed movements of an important business series are adequate proof of the necessity of recording local business data.

CHART III
FLOOR SPACE OF CONSTRUCTION CONTRACTS AWARDED IN OHIO
Corrected for Normal Seasonal Variation
Average Month 1920-1924 Equals 100 Source: F. W. Dodge Corporation



OHIO CONSTRUCTION CONTRACTS

Construction contracts awarded represent commitments and generally presage changes in construction activity. The Ohio curve shows a considerable upturn from January after the usual seasonal change is allowed for (See Chart III). The average seasonal gain in February as compared with January is about 10 per cent. This year the actual increase amounted to 34 per cent which indicates an increase of 21 per cent after the normal seasonal increase is allowed for. The February level shows an increase of 36.9 per cent from February of 1926. The Ohio curve in comparison with the national curve is shown in the upper left-hand section of the above chart. This curve indicates a continuation of a high level of construction activities in Ohio. However, the chart also shows that the Ohio curve has been running under the national curve for over a year.

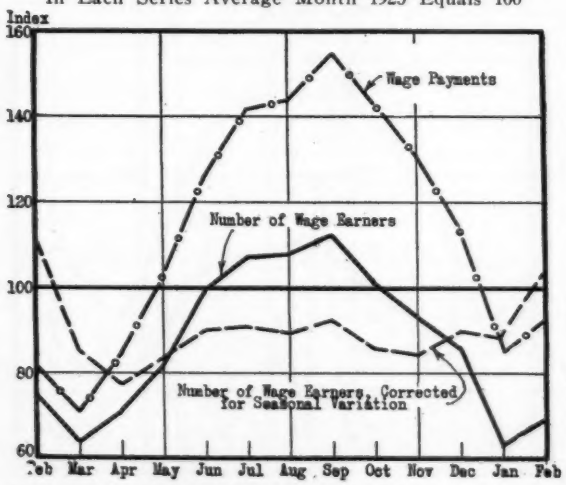
Six of the seven cities for which contracts are reported by the F. W. Dodge Corporation showed increases in February. Akron shows a severe drop but this is not of importance since the January level was super-normal in character. A phenomenal increase occurred in Youngstown. However, care must be taken in interpreting the month to month fluctuations in the contracts series. A special article is devoted to this subject in this number of the Bulletin. It is rather significant, however, that all of the cities except Cleveland show increases over February of 1926. The greatest increases occurred in Toledo and Dayton. The decline in Cleveland as compared with February 1926 amounted to 21.9 per cent.

EMPLOYMENT IN OHIO CITIES

Construction Industry

Construction employment in Ohio normally shows a slight drop from January to February. This year, however, the February data indicate a slight increase from January both in numbers employed and average daily wage payments. The curve showing the number of wage earners employed, corrected for the usual seasonal change, is now above 100 for the first time in twelve months. Compared with February, 1926, however, employment in February, 1927, was 6.1 per cent lower. All cities showed increases compared with January except Youngstown, where the decline was not significant. Dayton still continues to show the greatest increase as compared with the previous year while Canton shows the largest decrease. The data for the State are shown in Table II and the index numbers of the several cities are listed in Table I (See Chart IV).

CHART IV
EMPLOYMENT IN THE CONSTRUCTION INDUSTRY IN OHIO
February 1926 to February 1927
In Each Series Average Month 1923 Equals 100

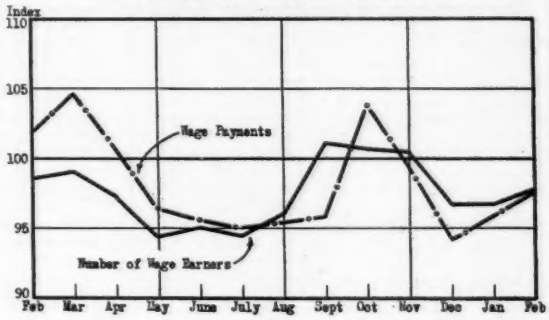


The Iron and Steel Industry

Employment in the Ohio iron and steel industry in February increased slightly as compared with January. The increase in the number of wage earners employed curve was about the same as the increase in the wage payments curve. The two curves for the last thirteen months are shown in Chart V. The February increases were not sufficiently large to bring the curves up to the February, 1926, level. However, the change is not great in the numbers employed curve. The level of employment is still slightly below the average level in 1923, the base year in the computation of the curves.

The data showing the condition of employment in the several divisions of the iron and steel industry are listed in Table II. Ohio blast furnaces employment in

CHART V
EMPLOYMENT IN THE IRON AND STEEL INDUSTRIES IN OHIO
February 1926 to February 1927
Average Month 1923 Equals 100



February continued the increase begun in January. The increase in numbers employed from January amounted to 3.5 per cent. The curve, however, is slightly below the February, 1926, level. The number of wage earners employed in Ohio steel works and rolling mills in February declined slightly. Compared with February, 1926, the curve also shows a decline of 8.5 per cent. The average daily wage payments curve increased slightly in February as compared with January.

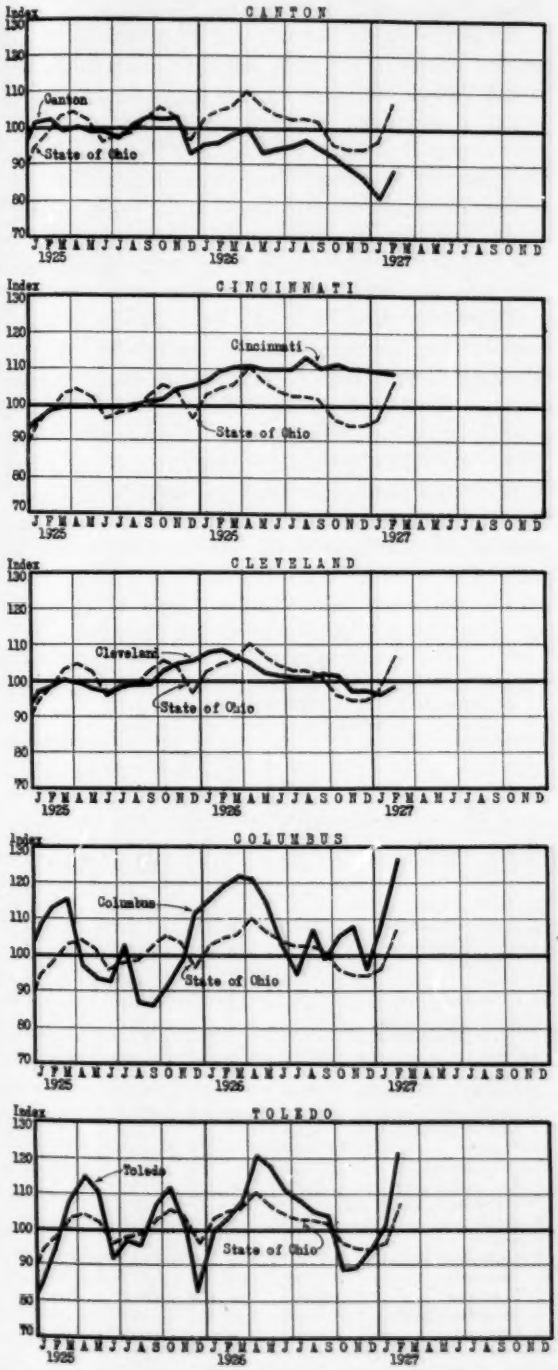
Foundry and machine shop employment in Ohio in February increased considerably from January. The number of wage earners employed was higher than at any time during the past twelve months. The increase from January amounted to 4.5 per cent.

TABLE II
EMPLOYMENT IN OHIO—FEBRUARY 1927

Industry	Jan. 1927	Feb. 1927	Chg. from Feb. 1926	Av. Jan.Feb. change from 1926
			%	%
A—CONSTRUCTION (93)+				
Av. Mo. 1923=100				
No. of Wage Earners Actual	62	70	−5.5	−12.2
No. o Wage Earners Corr. for S. V.	88	104	−5.1	−12.1
Av. Daily Wage Payments	85	92	+12.6	+5.6
B—IRON & STEEL—Av. Mo. 1923=100				
Iron and Steel Group (78)				
No. of Wage Earners	97	98	− .7	−.3
Av. Daily Wage Payments	96	98	−4.3	−2.6
Blast Furnaces (7)				
N. of Wage Earners	94	98	−2.6	−5.1
Av. Daily Wage Payments	100	103	+2.6	+ .2
Steel Work and Rolling Mills (12)				
No. of Wage Earners	101	97	−8.5	−6.3
Av.Daily Wage Payments	94	95	−10.1	−9.7
Foundries and Machine Shops (59)				
No. of Wage Earners	94	98	+4.5	+4.1
Av. Daily Wage Payments	97	99	−1.4	+1.7
C—METAL TRADES* (214)				
Av. Mo. 1923=100				
No. of Wage Earners	96	107	+2.1	−2.4

+(93) Indicates number of reporting firms
* From National Metal Trades Association

CHART VI
EMPLOYMENT IN THE METAL TRADES IN OHIO
January 1925 to Date
Average Month 1925 Equals 100



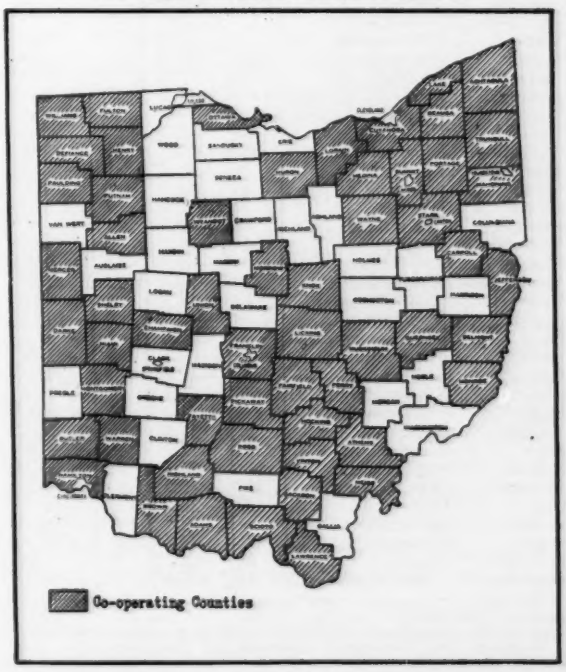
Employment in the Metal Trades

February witnessed a rather significant up-turn in metal trades employment in Ohio as indicated by the reports of the National Metal Trades Association. The situation is shown in Chart VI. Of the five Ohio cities for which data are reported, four showed increases over January. Only Cincinnati showed a decrease and this was insignificant. Columbus and Toledo registered very significant increases, pushing the curve to peak levels in both cases.

REGISTRATION OF AUTOMOBILE BILLS OF SALE

Reports have been received from 55 clerks of courts of Ohio counties showing the number of automobile bills of sale filed during the month. These reports show registration of 9,138 passenger car bills and 907 commercial car bills. The passenger car data show an increase of 5.5 per cent over January, while the commercial car data show a decrease of 22.7 per cent from January. During 1926 the available data show that February registrations exceeded January registrations by 10.6 per cent. If the 1926 record can be relied on as typical, the 1927 record shows that February of this year did not come up to expectations. However, the registration of over 9000 passenger car bills indicates a considerable level of activity.

CHART VII
COUNTIES FOR WHICH REGISTRATIONS OF AUTOMOBILE BILLS OF SALE ARE REPORTED
Through courtesy of Clerks of Courts.



Lucas County has been added since cut was made.

The counties reported in Table III represent slightly over 80 per cent of the population of Ohio as indicated by the population census of 1920. Such an inclusive group of counties can be relied on as typical of the entire state. The cooperating counties are shown in Chart VII. It is the aim of the Bureau to extend the list until every county in the state is represented in this Table.

TABLE III
REGISTRATION OF AUTOMOBILE BILLS OF SALE IN OHIO COUNTIES, FEBRUARY 1927
(The Counties Listed Represent over 80% of the Population of Ohio)
Source: Clerks of Courts of Listed Counties

County	County Seat	Pass. Cars		Com. Cars	
		Number	Per Cent Increase Over Previous Mo.	Number	Per Cent Increase Over Previous Mo.
Adams	West Union	35	−36.4	4	− 71.4
Allen	Lima	147	−31.6	5	− 85.7
Ashtabula	Jefferson	165	36.4	13	− 45.8
Athens	Athens	49	−45.6	7	− 50.0
Belmont	St. Clairsville	104	−31.1	12	− 36.8
Brown	Georgetown	19	−65.5	2	− 60.0
Butler	Hamilton	150	20.0	9	− 18.2
Carroll	Carrollton	23	15.0	7	600.0
Champaign	Urbana	36	−30.8	4	− 50.0
Cuyahoga*	Cleveland	2,228	52.6	201	− 23.0
Darke	Greenville	80	35.6	15	0
Defiance	Defiance	42	−63.5	6	− 50.0
Fairfield	Lancaster	89	−14.4	6	− 60.0
Fayette	Washington C. H.	45	−19.6	1	− 90.9
Franklin	Columbus	775	−11.2	——	——
Fulton	Wauseon	96	15.7	15	15.4
Geauga	Chardon	4	−50.0	3	− 50.0
Guernsey	Cambridge	42	−22.2	8	− 11.1
Hamilton	Cincinnati	884	23.6	128	66.2
Henry	Napoleon	58	−32.6	3	− 78.6
Highland	Hillsboro	37	−44.8	4	− 25.0
Hocking	Logan	20	33.3	1	− 66.7
Huron	Norwalk	92	− 3.2	19	90.0
Jackson	Jackson	33	−44.1	4	0
Jefferson	Steubenville	121	−24.8	11	− 69.4
Knox	Mt. Vernon	71	69.0	0	−100.0
Lake	Painesville	110	20.9	8	− 20.0
Lawrence	Ironton	55	− 3.5	11	− 42.1
Licking	Newark	104	− 5.5	10	− 60.0
Lorain	Elyria	176	18.1	19	− 5.0
Lucas**	Toledo	550	43.6	58	3.6
Mahoning	Youngstown	367	+22.3	37	260.0
Medina	Medina	76	35.7	3	− 76.9
Meigs	Pomeroy	22	57.2	4	100.0
Miami	Troy	92	9.5	7	− 63.2
Monroe	Woodsfield	8	−83.3	1	——
Montgomery	Dayton	584	21.7	93	16.3
Morrow	Mt. Gilead	25	−59.0	1	− 80.0
Muskingum	Zanesville	110	−26.7	12	50.0
Ottawa	Port Clinton	68	15.3	4	− 50.0
Paulding	Paulding	34	−43.3	0	−100.0
Perry	New Lexington	35	−57.8	4	− 63.6
Pickaway	Circleville	33	−41.1	5	− 37.5
Putnam	Ottawa	51	−42.7	4	− 60.0
Ross	Chillicothe	70	20.7	6	− 25.0
Scioto	Portsmouth	130	− 3.0	11	− 50.0
Shelby	Sidney	55	31.0	5	− 16.7
Stark	Canton	329	12.3	46	43.8
Summit	Akron	523	−25.3	54	− 39.3
Trumbull	Warren	230	5.5	20	− 41.2
Union	Marysville	25	−26.5	2	− 66.7
Vinton	McArthur	4	33.3	1	− 50.0
Wayne	Wooster	98	7.7	16	− 27.3
Williams	Bryan	61	−29.1	9	0
Wyandot	Upper Sandusky	35	− 5.4	5	− 54.5
Total of Comparable Counties		9,138	5.5	907	− 22.7

*Supplied by Cleveland Automobile Manufacturers and Dealers Association.
**Supplied by Toledo Automotive Trades Association.

THE TREND OF BUSINESS

Stock Market and the Business Situation

Table IV, page 8, shows that there was a rise of several points in the stock market during the month ending March 5th. The slightly larger increase in the prices of industrial stocks is a reflection of the improved tone in business and industry prevailing during the month of February. It is interesteing to note that the largest improvement is found in the prices of automobile and auto accessory stocks. While the automobile industry perhaps showed the most improvement in comparison with the low position of the industry in December, there seems to be some doubt as to whether the apparent position of the industry justifies the large improvement. The low rates of interest and the abundance of loanable funds have been a powerful stimulus in the maintenance of stock prices. While the current prospects indicate a continuation of prosperity during the first six months of 1927, it is improbable that industrial profits for the first half year will exceed those of the corresponding period in 1927. Under these circumstances the present range of stock prices seems high. Fisher's index of yields on high grade stocks went down from 5.2 per cent on Feb-

TABLE IV
STANDARD INDICES OF THE SECURITY MARKET
COMMON STOCK PRICES—BY GROUPS
Source: Standard Statistics Company, Inc.

Group	1927 Mar. 5	Change in points from Feb. 5*	1927 Range	
			High	Low
230 Stocks	157.7	+ 2.6	159.0	152.4
199 Industrials	164.5	+ 3.0	165.4	159.0
31 Rails	141.3	+ 1.8	144.9	135.7
10 Automobiles	244.5	+14.3	244.5	222.6
8 Auto Accessory	412.9	+26.4	412.9	373.4
11 Chain Stores	421.2	+ 4.7	427.4	412.3
7 Chemical	183.1	+ 2.2	184.5	178.1
3 Coal	67.3	+ 1.7	68.8	65.6
11 Copper	116.7	+ 1.9	116.7	114.3
3 Electrical Equip.	256.5	+ 4.3	260.4	248.6
3 Farm Machinery	167.8	+11.3	169.0	148.0
9 Food	319.6	+11.5	322.8	306.1
5 Leather & Shoe	58.3	− .1	59.4	56.9
5 Machine Manufact.	96.7	+ 1.5	98.1	93.6
3 Mail Order	178.4	+ 3.4	185.7	175.0
12 Metals (Misc.)	128.5	+ 5.3	128.5	120.3
13 Paper	83.9	+ 8.4	83.9	74.3
7 Petroleum	110.2	− 4.0	114.2	108.7
10 Railroad Equip.	188.9	+11.2	191.1	175.2
3 Shipping	21.0	− .7	24.2	21.0
9 Steel	126.4	+ 2.9	128.0	122.4
6 Sugar	69.5	− 1.5	72.0	69.5
5 Telegraph & Cable	170.4	+ 5.1	170.9	163.7
5 Textile	39.9	− .4	42.8	38.9
3 Theaters	180.2	+ 8.4	181.8	164.2
7 Tires & Rubber	53.8	+ 5.8	53.8	46.1
7 Tobacco	168.2	+ .6	168.7	165.2
16 Tract., Gas & Power	217.7	+ .0	221.3	214.6
18Misc. (Indusr.)	214.0	+ 4.3	215.3	207.9

*Indices shown in last Bulletin.

ruary 5 to 4.8 per cent on March 5. The range of this yield for 1927 has been from 4.2 to 5.2 per cent. The highest figure for 1926 was 6.5 which occurred in the week ending July 31. The lowest yield was 4 per cent which occurred in the week ending January 23, 1926. It is clear, therefore, that prices on yield basis are not at high as they were in January of 1926 but are at the same time considerably higher than they were in the summer of 1926.

Banking and Credit Conditions

At the end of the first week of March the rates of interest in the New York market remained the same for call loans and for four to six months paper as they were at the end of the first week of February. While the rate on prime commercial paper went up from 4 per cent to 4¼ per cent this movement was seasonal in character and corresponded to a similar movement in 1926. Rates for various classes of paper continue on a slightly lower basis than they were in 1926.

There was a gain of $41.3 millions in bills rediscounted by the Federal Reserve Banks which compares with an increase of $95.4 millions in the corresponding period in 1926. The total of rediscounts on March 2, 1927, was $434.6 millions in comparison with $583.2 millions on March 3, 1926.

The United States bank debits index, corrected for seasonal variation, went from 123.7 in January, 1927, to 130.7 in February, which compares with 127 in February, 1926. Total loans and discounts of the member banks of the Federal Reserve System on March 3 were also in excess of the total on the first week of March, 1926. The Federal Reserve ratio declined from 79 to 78 during February.

The present situation is characterized as one of a continuation of an ample supply of loanable funds at a comparatively low rate.

Iron and Steel Industry

The percentage of furnaces in blast increased from 56.9 in January to 59 per cent in February. Since 60 per cent is the computed normal it appears that the iron and steel industry is nearer a normal production basis than it has been during the past six months. The Iron Trade Review composite price of iron and steel registered a slight increase in the first week of March. The price of $36.79 compared with $36.75 for the three preceding weeks. The slight increase was due to a firmer pig iron market. The price of No. 1 wrought scrap at Chicago on March 9 was 50c higher than for the preceding week and 50c lower than for the corresponding week in February.

February's daily average pig iron production was 105,029 tons in comparison with 100,042 tons in January and 104,423 tons in February, 1926, according to the Iron Trade Review. The steel output was 155,232 tons compared with 146,419 tons in January and 158,407 tons in February, 1926. The present indications are that March, 1927, will be almost as good as March, 1926, when the industry operated at about 92.6 per cent of its capacity.

Construction Contracts Awarded

The volume of construction contracts in 37 Eastern States for February, 1927, as reported by the F. W. Dodge Corporation while still below that for the corresponding month of 1926, shows about the usual improvement over the preceding month. Reference to the Graphic Review indicates that industrial building shows a relative increase and has gone above the normal line. Residential building shows a relative decline with respect to other types of building. In 1925 and 1926 industrial building showed a relative expansion. In the case of the February figures the industrial building total for 37 Eastern States was above normal, whereas commercial and residence building was below normal (See Table V).

Another notable feature of the building situation is found in a revival in the Pittsburgh District. It is even going ahead of the Central West which has been the leader in the past six months. The Southeastern District, which moved ahead so rapidly along with the Florida boom, is now showing the most decided decline. The manufacturing areas which declined first are now showing the strongest building situation.

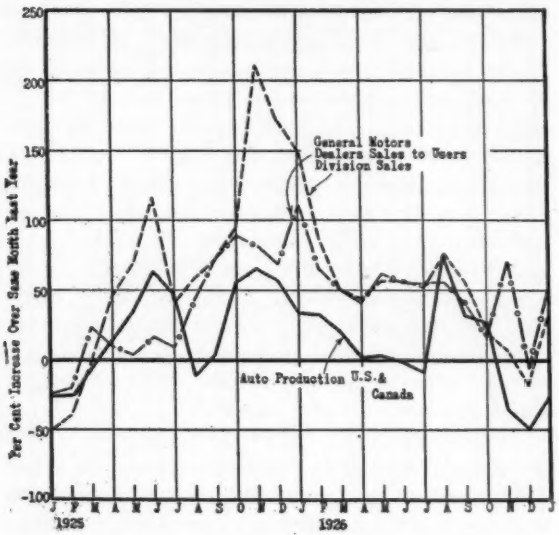
TABLE V
CONSTRUCTION CONTRACTS AWARDED IN 37 STATES AND BY DISTRICTS —FEBRUARY, 1927
Source: F. W. Dodge Corporation
(Millions of Dollars)

District	Jan. 1927	Feb. 1927	Change from Feb. 1926	Av. Jan.Feb 1927 from 1926	Change of
New York State and Northern New Jersey	$118.7	$103.6	− 1.2%	−26.0%	
New England	17.2	22.4	+13.7	−12.6	
Middle Atlantic	53.4	41.1	− 9.1	+52.9	
Pittsburgh	50.1	56.7	+22.7	+25.6	
Southeastern	42.3	46.1	−46.0	−41.5	
Central West	84.7	109.7	+28.6	+18.2	
Northwest	2.5	2.9	−45.3	−41.9	
Texas	15.5	12.3	−24.1	− 7.0	
Total of 37 Northeastern States	$384.5	$394.9	− 3.2	− 8.0	

Automobiles

The production of automobiles in the United States and Canada in January was 26.7 per cent lower than in January, 1926 (See Chart VIII and Table VI). The decrease as compared with the corresponding month last year was smaller in January than in December. The general movement of production corresponds closely with the sales of General Motors although the latter has continued to be higher than in the corresponding month of the preceding year except in December, 1926. The automobile sales in the

CHART VIII
PASSENGER AUTOMOBILE PRODUCTION IN UNITED STATES AND CANADA, AND GENERAL MOTORS SALES
January 1925 to Date by Months
Sources: U. S. Department of Commerce and Financial Chronicle.



Chicago Federal Reserve District for January show a decline as compared with the preceding year similar to that observed in automobile production.

It should be noted that declines in automobile sales and automobile production are out of proportion to the recession tendency which has been observed in employment and volume of trade. It is fair to raise the question as to whether this circumstance does not suggest some tendency toward the saturation of the automobile market in so far as new users are concerned. If this be true, the volume of automobile sales may continue to compare less favorably with the preceding year than will be found to be true in the case of the other important fields of production.

Employment

The New York Bureau of Labor reported an upward tendency in employment for the month of February, the index of factory employment being 97 as compared with 102 in February 1926. Improvement was reported in the automobile industry, in the manufacture of heating apparatus, in basic metal production, and in the textile mills. There was some decline in the machinery and electrical equipment employment and also in the building material field. The industrial employment curve for Ohio (See Chart I, page 3), showed a decided gain for February, rising almost to the 1923 level. The national index of employment in manufacturing industries, as shown by the Bureau of Labor statistics dropped decidedly for the month of January, January being the third month in which employment over the country as a whole has declined. The index for January stood at 89 which compares with 93 at the same time in 1926. In the state of Ohio industrial employment in February was about 3 points below that for the same period last year although in January it was about 5 points below January, 1926. Current reports of improvement in the industrial situation during February will probably bring the February employment index in the United States up to some such point as that indicated in the improvement of the situation in the industries of Ohio.

The Agricultural Situation

In its agricultural outlook for 1927 the U. S. Department of Agriculture forecasts a favorable year in the live stock business but comparatively low returns for most cash crops. It advises a 30 per cent curtailment in cotton acreage. The price of farm products showed no substantial change in February (See Table VIII, p. 11).

Retail and Wholesale Trade

Reports from the Fairchild Analytical Bureau show only a very slight gain in February retail sales as compared with February, 1926. The total sales for department stores, taking into consideration all districts, showed a gain of 2.5 per cent, although in a number of districts declines ranged from 1 per cent to 9.6 per cent. These declines reflect both the declines in employment and the lower prices of agricultural products. Manufacturing districts are at the present time in a better position than agricultural areas. Boston, Milwaukee, Minneapolis, New York, San Francisco, Buf-

TABLE VI

PASSENGER AUTOMOBILE PRODUCTION IN THE UNITED STATES AND CANADA, AND GENERAL MOTORS SALES
JANUARY, 1927
Source: U. S. Department of Commerce; Commercial and Financial Chronicle.

Group	December 1926	January 1927	Change From Jan. 1926	Year 1926	Change From 1925
Automobile Production	143,413	208,718	−26.7%	3,929,535	2.4%
General Motors Sales:					
Dealers sales	52,729	81,010	50.9	1,215,826	46.9
Division sales	44,130	99,367	30.2	1,234,850	47.8

TABLE VII

AUTOMOBILE TRADE IN PHILADELPHIA AND CHICAGO FEDERAL RESERVE DISTRICTS JANUARY, 1927

Source: Federal Reserve Banks

Classes of Cars	Philadelphia District Change From		Chicago District Change From	
	December 1926	January 1926	December 1926	January 1926
New Cars				
Wholesale—Number Sold	+126.4%	+37.6%	+32.2%	−23.1%
Value	+93.6	+15.6	+31.4	−27.3
Retail—Number Sold	+71.6	+27.0	−20.0	−30.7
Value	+40.3	+18.5	−23.7	−22.4
On Hand Jan. 31—Number	+42.2	− 9.8	+12.1	− 7.0
Value	+35.1	+ 9.5	+ 9.5	− 3.8
Used Cars				
Number Sold	−12.0	+18.2	−12.4	− 3.4
Salable on Hand—Number	+ 7.3	+22.2	+ 1.2	− 2.5
Value	+ 6.0	+26.3	− 9.4	+ 8.7

TABLE VIII

COMPARATIVE WHOLESALE PRICES FOR VARIOUS GROUPS IN THE UNITED STATES—FEBRUARY 1927

Average Month 1913 Equals 100

Source: The Annalist

Commodities	March 1, 1927	Feb. 1927*	Change from Feb. 1926*
Farm Products	134.3	134.6	− 9.5%
Food	151.6	152.8	− 1.9
Textile Products	143.8	143.2	−17.0
Fuels	176.6	182.1	− 5.2
Metals	122.7	122.4	− 4.5
Building Materials	163.0	162.6	− 5.3
Chemicals	134.6	135.2	+ 1.1
Miscellaneous	121.2	120.2	−13.8
ALL COMMODITIES	144.5	145.0	− 6.8

*Average monthly price index

falo and other cities reported gains and New England cities in general also report gains. The declines were found in Philadelphia, St. Louis and Dallas.

National department store sales corrected for seasonal variation and trend stood at 104.2 in February as compared with 111.8 in February, 1926. The improvement of February over January, however, was 3.2 points whereas in February, 1926 there was a slight decline as compared with January. Sales of two leading mail order houses declined 3 per cent as compared with February, 1926.

The Federal Reserve Board's index of sales for five and ten cent stores in February, 1927, when corrected for seasonal variation and trend stood at 108.6 as compared with 101.5 in February, 1926. The increase of the index in February, 1927, over January was 5.1 points whereas there was a decline of about 1 point in February, 1926. In the Ohio wholesale grocery trade the Bureau's preliminary index of sales decreased from 73.5 in January to 71.4 in February which compares with 76.5 in February, 1926.

Wholesale Prices

The trend of wholesale prices during the past two years is shown on Chart IX, page 12. Fisher's Index on March 19 was only 1.6 points above the lowest level reached since the war, which occurred in January, 1922. There has been a check in the decline of the prices of farm and textile products, which have accounted for the most drastic downward movement in the past year. The factors of chief significance in the price situation are the overproduction of farm products, the check in the building boom, the check in automobile production, foreign competition, and probably an over-expansion in plant and equipment as compared with the buying capacity of consumers. The latter factor is associated to some extent with the reduction in the buying capacity of farmers. Still another factor in the current situation is the increasing productivity of labor due both to more regular employment and to improvements in machinery.

Foreign Trade

The decline in imports into the United States reflects the industrial recession tendencies of the past three months. While exports for January increased over January, 1926, the net balance of exports was less than it has been during the past three months (See Table IX).

Table X shows a continuation of the rise in gold prices in France. This rise is due to the rapid change in the gold value of the franc arising out of the stabilization of the value of paper francs. The fact that the foreign trade position of France shows improvement for January notwithstanding the depressing effect of the decline of paper prices is a gratifying circumstance in its relation to European recovery.

CHART IX
THE ANNALIST WEEKLY INDEX OF WHOLESALE PRICES
Since January 1925
Compared with B. L. S. Index
Average Month 1913 Equals 100 Source: The Annalist

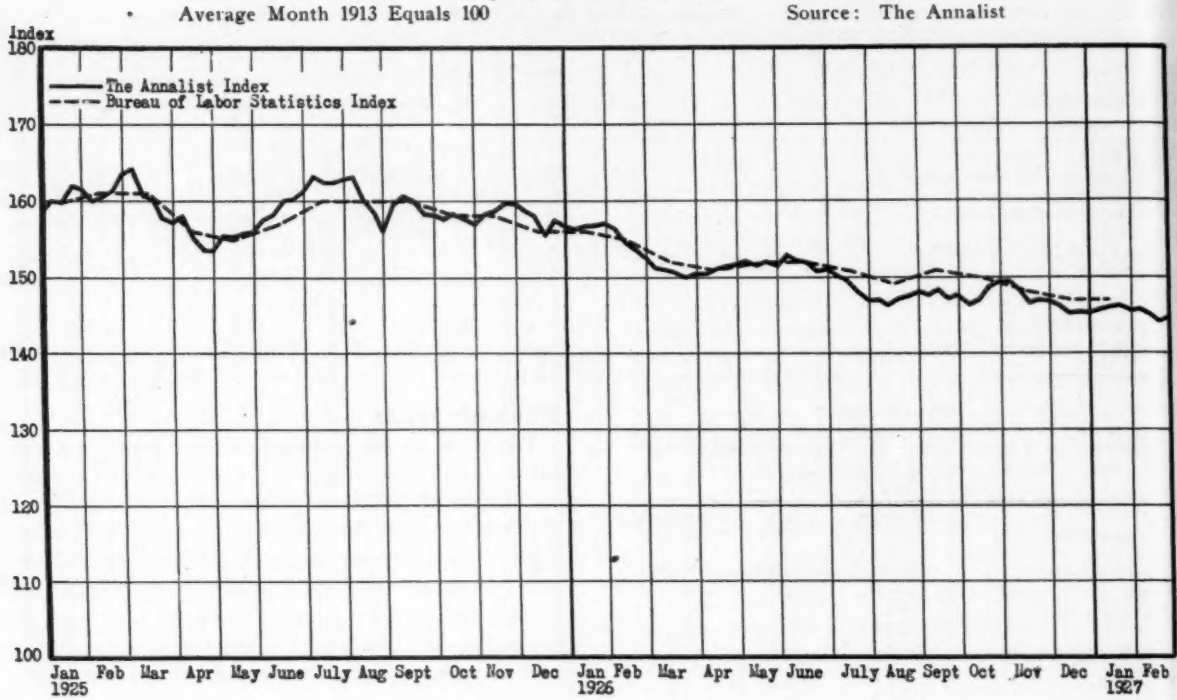


CHART X
FOREIGN TRADE
Chief Industrial Nations
Source: U. S. Department of Commerce.

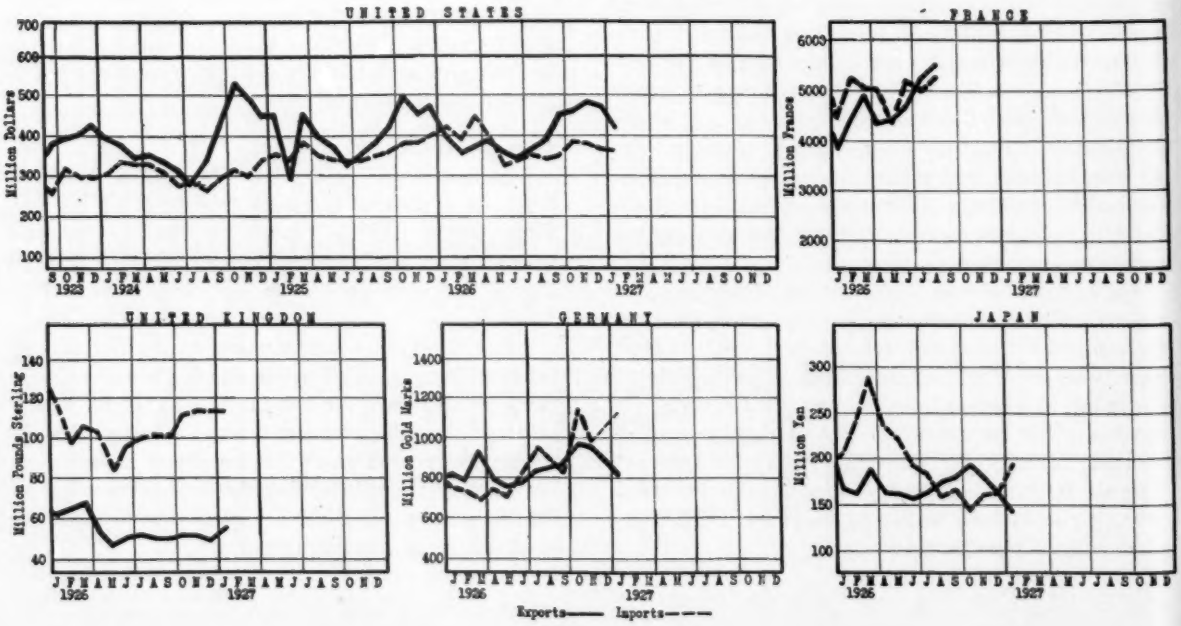

UNITED STATES
Million Dollars
700
600
500
400
300
200
100
S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1923 1924 1925 1926 1927
FRANCE
Million Francs
6000
5000
4000
3000
2000
J F M A M J J A S O N D J F M A M J J A S O N D
1926 1927
UNITED KINGDOM
Million Pounds Sterling
140
120
100
80
60
40
J F M A M J J A S O N D J F M A M J J A S O N D
1926 1927
GERMANY
Million Gold Marks
1400
1200
1000
800
600
400
J F M A M J J A S O N D J F M A M J J A S O N D
1926 1927
JAPAN
Million Yen
300
250
200
150
100
J F M A M J J A S O N D J F M A M J J A S O N D
1926 1927
Exports—— Imports– – –

TABLE IX
FOREIGN TRADE
Chief Industrial Nations
(In Millions)
Source: U. S. Department of Commerce

Country	December 1926	January 1927	Chg. from Jan. 1926
United States			
Imports (Dollars)	361.0	359.0	−13.9%
Exports (Dollars)	419.0	419.0	5.5
United Kingdom			
Imports (Pounds Sterling)	113.3	113.6	−3.6
Exports (Pounds Sterling)	49.7	55.4	−8.3
Germany			
Imports (Gold Marks)	—	1,154.0	57.4
Exports (Gold Marks)	—	800.0	−0.1
Japan			
Imports (Yen)	162.3	192.1	−15.7
Exports (Yen)	166.4	141.1	−4.0
France			
Imports (Francs)	—	4,079.0	28.6
Exports (Francs)	—	4,708.0	32.1

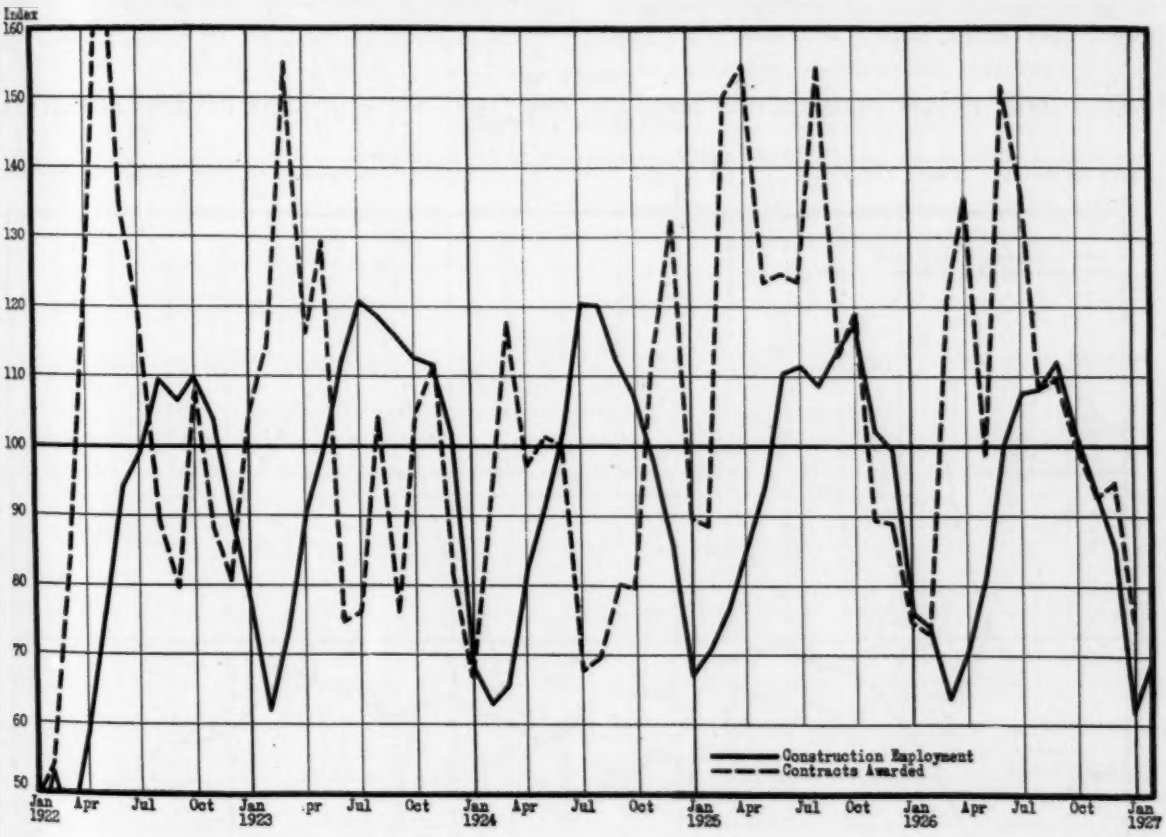
TABLE X
INTERNATIONAL WHOLESALE PRICE INDICES
(In Terms of Gold, Pre-War Equals 100)
Source: Federal Reserve Bulletin

Country	Nov. 1926	December 1926	Change from December 1925
United States (B. of L. Statistics)	148	147	− 5.8 %
England (Bd of Trade)	151	146	− 4.6
France (Fed. Res. Bd.)*	1170	1208	21.4
Germany (Fed. Statis. Bur.)	132	131	7.4
Japan (Tokyo)*	168	167	— 0.6

*The Board's indices were converted on the basis of changes in the dollar value of the currency unit. The average of the cable transfer rates for the month was used.

CHART XI
EMPLOYMENT IN THE CONSTRUCTION INDUSTRY AND FLOOR SPACE OF CONSTRUCTION CONTRACTS AWARDED IN OHIO
January 1922 to February 1927

In Each Series Average Month 1923 Equals 100 — Contracts Awarded from F. W. Dodge Corporation



THE RELATIONSHIP BETWEEN CONSTRUCTION CONTRACTS AWARDED AND CONSTRUCTION EMPLOYMENT IN OHIO

It is generally recognized that construction contracts awarded represent commitments rather than actual construction operations. The best measure of actual operations is the amount of construction employment. The Bureau's index of construction employment is based on reports from general contractors and tests have been made proving the representative character of this index. This index will be described at length in a subsequent number of the Bulletin. The problem here is to show the relationship between this employment index and the volume of construction contracts awarded in Ohio as reported by the F. W. Dodge Corporation.

The two series without a correction for the seasonal movement are shown in Chart XI. The comparison of the curves shows two features worthy of comment. The first is the difference in the seasonal movements of the two series. This is described in the next paragraph. The second feature, and perhaps the most important one, is the wide divergence in the month to month fluctuations of the two series. The construction curve moves up and down through the seasonal cycle with regularity while the contracts curve fluctuates from month to month in an erratic manner. It is obvious that these great month to month fluctuations are of no particular significance as far as actual construction operations are concerned.

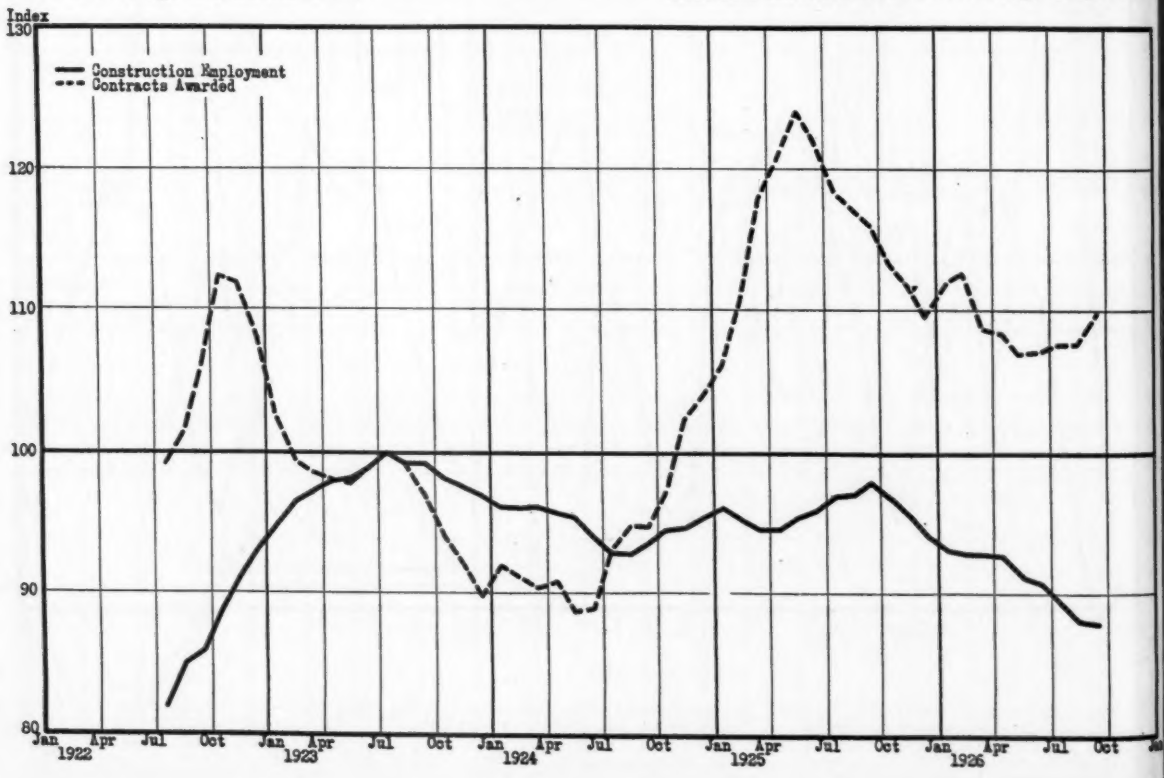
The significant values in the contracts series are the annual totals. The contracts awarded represent commitments and except in unusual circumstances these commitments are carried out. The great month to month fluctuations in contracts awarded are, however, fortuitous to a considerable extent. A contract which will swell the volume of construction activity in a given year may be awarded in any one of several months. Clearly, then, an unusually large or small value for a given month does not necessarily signal a rise or fall in construction volume. These monthly variations must be interpreted with care since chance is so clearly a factor in the time of awarding a contract. The annual totals are far more significant as

CHART XII

EMPLOYMENT IN THE CONSTRUCTION INDUSTRY AND FLOOR SPACE OF CONSTRUCTION CONTRACTS AWARDED IN OHIO

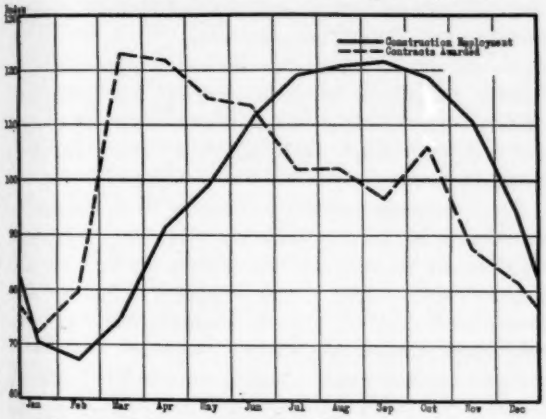
12 Months Moving Average of Index Numbers

Based on Average Month 1923 as 100 Contracts Awarded from F. W. Dodge Corporation



indicated by Chart XII. In this chart the two curves represent twelve months' moving averages of the two series, centered on the seventh month for convenience. The smoothness of the contracts curve is notable in comparison with the actual monthly curve as plotted in Chart XI. This smooth contracts curve is representative of the regularity of contracts awarded when twelve-month totals are considered, and shows that the extreme variation in the month to month fluctuations is not significant.

CHART XIII
NORMAL SEASONAL FLUCTUATION IN OHIO CONSTRUCTION EMPLOYMENT* AND CONTRACTS AWARDED†
In Each Series Average Month Equals 100
Contracts Awarded from F. W. Dodge Corporation



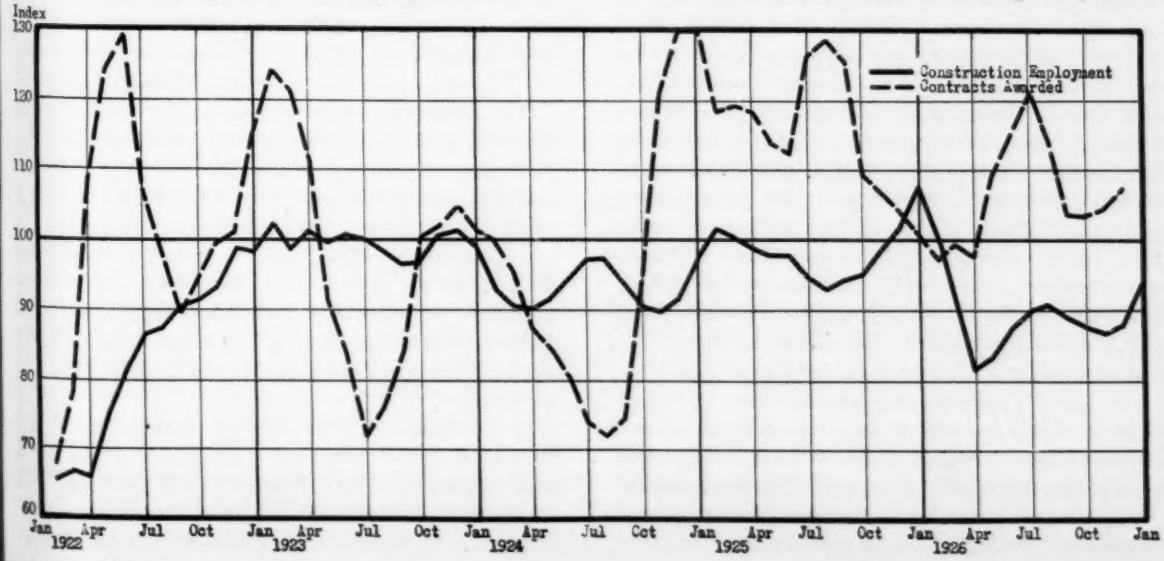
*Computed from period 1914-1924.
†Computed from period 1919-1926.

It is clear from an examination of Chart XI that both construction employment and contracts awarded are subject to extreme seasonal fluctuations. The average seasonal movement in the two series has been computed and the results are shown in Chart XIII. The seasonal movement in construction employment is consistently regular but this is not true of the contracts series. The seasonal curve for the contracts series is approximate only. It is interesting to note the time variation in the occurence of the seasonal peaks. The average peak in contracts awarded occurs in March-April while the peak in construction employment comes in August-September. The two series after this seasonal movement has been allowed for are shown in Chart XIV. The seasonally corrected contracts series does not yield a smooth curve because of the irregular character of the seasonal variation. The wide swings in the contracts curve are shown in sharp distinction to the fairly even fluctuations of the employment curve. The rapid drop in the employment curve in the first quarter of 1926 was due to strikes in the building trades in Cleveland and elsewhere. It will be noted that the contracts curve generally moves earlier than the employment curve. This lead, however, is often obscured by erratic monthly variations.

THE ANNALIST WEEKLY INDEX OF WHOLESALE PRICES

Current economic series lose much of their value when their computation must be delayed. This is

CHART XIV
EMPLOYMENT IN THE CONSTRUCTION INDUSTRY AND FLOOR SPACE OF CONSTRUCTION CONTRACTS AWARDED IN OHIO
Corrected for Normal Seasonal Variation, 3 Months Moving Average
In Each Series Average Month 1923 Equals 100 Contracts Awarded from F. W. Dodge Corporation



especially true in the field of prices. D. W. Ellsworth and Ruth Houghton have computed an index of wholesale commodity prices by weeks since January, 1925, which index is published weekly in the Annalist (The New York Times Company). The close relationship between this weekly index and the U. S. Bureau of Labor Statistics monthly index of wholesale prices was shown in the January number of the Journal of the American Statistical Association. This is shown here in Chart IX.

This weekly price index is also available for important groups of commodities, paralleling the groups of the Bureau of Labor Statistics except for house furnishings. The price changes in the groups are indicated in Table VIII, page 12.

MARKET ANALYSIS OF APPLES

For some time the Bureau of Business Research has been conducting an analysis of the distribution of apples in Ohio. The details are now being gathered into a complete report. The following is a brief summary of some of the facts discovered.

In the past many food products have been produced regardless of the existence of a favorable consumer demand. The fruit growing industry's problems are largely the result of following a production policy and ignoring a merchandising program.

The primary objects of this study are: (1) to furnish academic information concerning the presence or absence of certain fundamentals in merchandising fruit; (2) to determine whether the retailer can induce his customers to take the available supply or whether the producer must grow the type that meets the approval of the consumer; (3) to analyze the merchandising factors which will aid the planning of future advertising campaigns.

The territory covered includes Ohio cities of more than 100,000 population and a number of towns of less than 20,000. In analysing a large city, classification is made of the consumers according to race, nationality and wealth. The analysis of retail problems is based to some extent on the classification given the consumers of the particular district; in addition an analysis within a city includes the merchandising experiences of wholesalers, brokers, hotels and restaurants, and pie bakers. Available statistical data relating to the distribution and value of apples and the importance of competitive fruits are being made use of in the Bureau's analysis.

The survey indicates that the varieties of apples which a retailer can sell depends upon his clientele—whether native, foreign, white or colored, and their contact with rural life. Foreigners invariably prefer red varieties. Grocers have experienced that unusual varieties are difficult to sell; a common name must be substituted. A variety which sells easily in one city often meets consumer resistance in another.

Appearance is the primary factor which induces the average customer to buy or reject; this is why customers often fail to identify Ben Davis if sold under any of its many aliases — it is an attractive variety without definite identification marks which the customer can easily recognize. Quality is of importance in promoting a repeat sale. The average customer places apples in two categories, cooking and eating; thus the grocer is usually asked for good cooking or eating apples, and is rarely asked to fill an order for a certain variety.

Housewives buy apples in terms of 25 cents worth, averaging 4 pounds to a purchase. As living conditions become more congested in cities, consumers continue reducing the size of their purchases.

Hotels and restaurants prefer western box fruit for baking, because a required uniformity of size and quality is provided; a customer who is served a small flattened baked apple feels slighted if others are given a large whole serving.

Pie bakers are gradually changing their demand to canned apples, thereby securing a uniform quality at all times of the year and eliminating the expense and inconvenience which attends paring. Bakers who prefer fresh fruit for apple pies usually do so to maintain a high quality of product.

Nearly as many cars of citrus fruit as of apples are sold in the larger Ohio cities. The maximum car movement of apples is in October; and the maximum period for oranges begins in January, creating strong competition with storage apples.

THE TRI-STATE CONFERENCE OF THE RETAIL CREDIT MEN'S NATIONAL ASSOCIATION

By Theodore N. Beckman, Professor of Marketing, College of Commerce and Administration.

The annual conference of retail credit grantors from Ohio, Indiana, and Michigan was held this year on February 16 and 17 at Cincinnati. Practically all sessions were conducted under the able chairmanship of Mr. H. C. Sparks, vice president and manager of the Cincinnati Morris Plan Bank. Almost all of the department stores and many of the other large retail establishments in these states were represented at the conference, all intent on ironing out some of the perplexing problems that have arisen in the credit field within recent years.

As would be expected, a number of papers were read by leaders of the group on: "The Credit Department as a Business Builder"; "Retail Credit Granting as a Profession"; "Installment Selling"; "The Retail Credit Manager of Tomorrow"; "Problems of the Bureau

Manager"; "Commercial Arbitration vs. Commercial Litigation," and "The Interdependent Relationship between All Forms of Credit." Among the more prominent of the speakers were: the newly elected president of the organization, C. C. Driver, credit manager of May Company of Cleveland; D. J. Woodlock, managing director of the Retail Credit Men's National Association; R. V. Chaffe, credit manager of Ernst Kern Company of Detroit; W. Slater, credit manager of the Sterling & Welsh Company of Cleveland; Miss Englehardt, secretary of the Potter Shoe Company of Cincinnati; F. Parker, vice president of the Merchant's Credit Bureau of Detroit, and H. O. Jones, manager of the Dayton Retail Credit Company.

Probably the most interesting part of the conference consisted of the informal discussions that occurred during the open forum conducted at each of the regular sessions. Questions submitted by various members of the organization formed the basis for all of these discussions. The topics were many and varied. One such question related to the ways and means of raising the rapidly decreasing collection percentages, for it appeared that practically all firms experienced difficulty in maintaining their collection percentage standard during 1926. This naturally led into a consideration of the possible causes or reasons for the phenomenon. The most important reasons given were: installment selling, inadequate collection facilities and systems, and the lagging of collection methods behind the increasingly intensive and aggressive sales methods. It was pointed out that a very direct relationship exists between outstandings or collection percentages on thirty-day accounts and the volume of installment selling. It was the consensus of opinion that inasmuch as vendors on the installment plan have a lien on the property thus sold and use effective follow-up systems which are not adaptable to ordinary credit transactions, there is a tendency among consumers to pay their installments and let their regular accounts wait. Some little difference of opinion developed on this point and it was the general feeling that data on this subject would be most welcome and that attempts should be made to gather whatever information that will throw light on the situation.

Among topics discussed in the open forum were the methods of paying billers, the advantages of closing books before the end of the month, the use of guaranteed accounts, and the advisability of using credit limits. Some concerns pay billers in the form of commissions on the basis of the number of invoices made out during the month, others use bonus systems in addition to guaranteed weekly wages, while still others pay definite amounts but deduct certain sums for errors in billing at a rate determined in advance.

On the score of closing books before the end of the month, it was disclosed that the two purposes of the practice were to prevent discouraging sales towards the end of the month and in order to present statements before competitors. This practice is disadvantageous, however, inasmuch as it results in keeping two sets of figures. Especially does it lose strength as it becomes more or less universal. Furthermore, competition may force retailers to close their books much earlier. Even now many firms close their books on the 25th of the month, a practice that is to be frowned upon for the reasons indicated.

Although the consensus of opinion regarding the use of guaranteed accounts was to the effect that the practice breeds dissatisfaction, some stores are using it with much success. It has been the experience of those who have succeeded in its use that guarantees are generally good and enable the store to open accounts which would otherwise have to be declined and to extend credit to customers who fall short of meeting the credit department standards. When the risk is decidedly inferior, the probability is that the guarantor will refuse to sign any guarantee.

The greatest amount of time by far was devoted to a consideration of installment selling and its effects on the entire credit structure. Many differences of opinion were expressed on all sides, the general tone of most credit managers operating on a thirty-day basis or some other similar plan being extremely conservative, while those who sell almost entirely on that basis rallied to its defense. The two common errors commited in this discussion were the attempts to make a moral issue out of installment selling as if it were purely a question of ethics rather than a business proposition similar to any other legitimate business policy and to apply experience in one line of trade to all others. Obviously, the terms of sale in the extension of credit to retailers in the jewelry trade and the margins of profit are so wide as compared with other lines as to vitiate any comparison between the results of installment operations in that field with those obtained in the marketing of other products on which terms are short and margins of profit extremely narrow.

THE WINTER CONVENTION OF AMERICAN MANAGEMENT ASSOCIATION

Hotel Pennsylvania, New York City, February 15, 16, 17, 18, 1927.

The sessions of the Association organized its material around the problems of production forecast and the job analysis and methods of selection necessary to supply an effective personnel for the carrying out of such production program. Having determined upon

the desirability of meeting the growing complexity of industry with the decentralization of responsibility, maintaining the organic unity of the enterprise by the centralization of coordination, we are then confronted with the problem of the program of the organization.

In setting up this program, it is necessary to consider external conditions and internal conditions. External conditions have to do largely with market analysis both as to the consumption of the product and as to the probable costs of production. Dealing with internal conditions it is necessary, first, to determine the organic purpose of the enterprise and then to lay out the various functional activities so as to procure a maximum return. This problem has to do primarily with matters of personnel but it also has of necessity to do with job and process analysis.

It was pointed out that before we determine any program, it is necessary to canvass the resources and limitations entering into the arrangement of these internal functional activities. These viewpoints were developed with considerable skill and insight by Mr. Donaldson Brown, Vice President of the General Motors Company, who stressed a need for highly sensitive coordination between markets and production control, by Professor James O. McKinsey of the University of Chicago, and by Robert B. Wolf. The forecasting of external conditions was presented in a major paper by R. B. Flersheim, Vice President in charge of sales for the American Radiator Company, and was ably discussed by W. C. Clark, Economist for the S. W. Straus & Company, Inc.; M. C. Rorty, Vice President of the International Telephone and Telegraph Corporation; and Joseph H. Barber, Assistant to the President, Walworth Company.

It was pointed out that however excellent the organization of the enterprise and of its program, the test of competence lies in the measure of executive leadership. Henry C. Metcalf, Vice President, Continental Baking Corporation and for many years engaged as author, publicist, and teacher in the field of personnel management, described the characteristics essential to successful executive leadership. His presentation was marked by a praiseworthy attempt at some sort of philosophical interpretation. It was somewhat weakened by the lack of sufficiently critical attention to the significance of objectives for the determination of executive policies. This weakness was somewhat imperfectly brought out by Dr. C. R. Mann, who urged the desirability of formulating working hypotheses as a means for determining the direction which policies and programs should take.

Considerable attention was paid to the job analysis of executive requirements. Some objection was raised as to the practicability of job analyzing not only the chief executives but also the higher rank executives. It was pointed out with considerable force that the tendency of upper rank executives to merge into the chief executive group increases this difficulty. Not only are there apt to be resentments on the part of major executives against comparison with associates but there is the further difficulty that the higher the level of executive position the more must be left to constructive discretion. There is also the administrative difficulty in evaluating the job of higher executives arising from the uneasiness the analysis might have in misrepresenting the characteristics of the job or the fitness of its occupant.

One of the valuable contributions to the discussion of job analysis for higher executives was the value of such analysis for the correction of bias which chief executives are apt to develop out of their success as administrators in subordinate position. For example, the treasurer upon becoming a chief executive is apt to stress the financial side of the business, the production manager the production side, the sales manager the sales, etc. Harry A. Hopf, of the H. A. Hopf and Company, maintained throughout his discussion a wholesome skepticism regarding the possibilities of job analysis for the top positions and also as to the ultimate advantages of over-refinement at the bottom. One of the most interesting contributions to this discussion was that made by Miss Marie P. Sealy, Assistant Director of Planning, R. H. Macy & Company, Inc., who developed the use of job analysis as a basis for rate and salary setting. The use of job analysis in this manner was treated as a part of the budgeting technique and as such opens up to us a large and fruitful field for further applications of job analysis.

Throughout all the discussion on job analysis it was interesting to note the emphasis that was placed on the need for quantitative analysis rather than on qualitative analysis. The prevailing disposition seemed to be to bring job analysis, job specifications, and promotional plans into terms which could be embodied in a financial budget. The critical tests which should determine the adoption of such devices, under present conditions of business, seem to make imperative the use of the quantitative method. While several warning notes were struck as to the danger of over-mechanizing the administration of business and particularly of personnel relationships the general feeling seemed to be that the change from a qualitative to a quantitative basis was not only an almost imperative, but from the standpoint of developing a professional technique, a highly desirable change.

The use of the stop watch with some of the more recent and ingenious refinements developed for its more critical and flexible use, was described by Mr.

Thompson of the Thompson and Lichtner Company, Inc., who is perhaps the outstanding advocate for what might be called the classic school of time and motion study, which traces its beginning to Mr. F. W. Taylor. The more recent development of time and motion study originating with Gilbreth was described and demonstrated with films taken on actual jobs by R. N. Blakelock of the General Electric Company, and further interpreted by Miss Eugenia Lies of the R. H. Macy & Company, Inc., and by Mrs. Frank B. Gilbreth, President, Gilbreth, Inc.

Having carried into considerable detail the organization and application of job analysis and of its results in job specifications for processes and executive jobs, the next question to arise is the filling of these specifications. Earl B. Morgan of the Curtis Publishing Company, presented a paper on the ethics and methods of handling references as to equipment to fill every specification with a completeness, sanity, and sympathy highly commendable.

Taken all together this conference of the American Management Association has been one of the best in several years.

BOOK REVIEW

National Industrial Conference Board Bulletin, by National Industrial Conference Board.

With the first number of the Conference Board Bulletin we have the entry of a new source of periodic information. From time to time the National Industrial Conference Board has issued studies of immediate and authentic practical value. These studies have been in constant demand among practical business men, economists, and economic statisticians. These will welcome this new publication. If the first number is to be any index of the type of material to be supplied in this publication, we should congratulate ourselves upon the venture.

An inspection of the table of contents herewith listed will give some idea of the nature of the contents in this first issue. The topics featured are such as have for the last ten years or more engaged the active attention of the National Industrial Conference Board. "The Composition of the American Working Population" is an excellent article representing in concrete and graphic manner trends in the mortality of various trades, professions, and enterprises. It is accompanied by a well-arranged tabular presentation of data from the United States Census and a simple graphic chart which shows the movement above and below the distribution of 1870.

There are also charts of the hourly earnings by Industrial groups since 1914 and changes in major items of cost of living since July, 1914, showing a pie chart distribution of the major items in the wage earner's family budget in 1914. These are also accompanied by supporting tabulations and descriptive text.

The February issue presents several interesting charts making a dramatic distinction between "real" and "money" hourly earnings in manufacturing industries. The comparative curves begin at 1922 and run to the end of 1926. In the "Purchasing Value of the Dollar," based on the cost of living, which is obviously supplementary to the above chart, we see variations in the purchasing value of the dollar shown on a curve distribution, each point from July, 1914, to January, 1927 being designated by a pie chart. This enables the eye to get both the trend movement and the actual depreciation of the dollar's purchasing power at each of these calendar points.

The book review section is a valuable part of the Bulletin. The reviews are fairly numerous, covering approximately eight to ten texts or articles. They are brief condensations such as should be welcomed by the business executive.

Altogether the new publication is one which should engage the lively attention of all students and administrators in the industrial field.

CONVENTION CALENDAR

April 19-20	Cleveland, Ohio	American Institute of Mining and Metallurgical Engineering. H. Foster Bain, Secretary, 29 West 39th Street, New York City.
April 22-29	Chicago, Illinois	Retail Delivery Association. A. W. Einstein, Manager, 225 W. 34th Street, New York, N. Y.
April 26	Detroit, Michigan	National Metal Trades Association. J. E. Myhan, Secretary, 122 S. Michigan Avenue, Chicago, Illinois.
May 17-20	Louisville, Kentucky	American Wholesale Grocers Association. R. H. Rowe, Secretary, 900 Investment Building, Washington, D. C.
May 21	Cincinnati, Ohio	The National Association of Foremen. E. H. Tingley, Secretary, 1249 U. B. Building, Dayton, Ohio.
May 19	New York City	National Industrial Conference Board, Inc. James M. Robertson, Secretary, 247 Park Avenue, New York City.
May 30	Homestead, Hot Springs, Virginia	National Electrical Manufacturers Association. Alfred E. Waller, Managing Director, 30 East 42nd Street, New York City.

PUBLICATIONS OF THE BUREAU OF BUSINESS RESEARCH

The publications of the Bureau of Business Research are of three types: (1) regular bulletins reporting results of studies conducted by the Bureau; (2) special bulletins presenting preliminary or informal reports of limited scope and of interest primarily to certain trade groups; (3) monthly bulletins dealing with current business conditions, both in general and in special fields.

Bulletins in the regular series, when available for general distribution, will be sent upon receipt of check. Bulletins in the special series will also be generally available, but in limited quantities and subject to withdrawal on exhaustion of the supply. The list below contains the numbers, titles, and prices of the bulletins so far published:

REGULAR SERIES

No.	*Title*	*Price*
R-1	Salesforce Compensation and Expense of Ohio Wholesale Grocers—Year 1924	$ .50
R-2	A Uniform System of Accounts for Retail Furniture Dealers (price to residents of Ohio, $1.00) regular price	5.00
R-3	Housewives' Buying Habits in Columbus, Ohio—Year 1924	.50
R-4	Salesforce Compensation and Expense in Retail Furniture Stores of the Ohio Valley—Year 1924	.50
R-5	The Ten-Payment-Plan of Retailing Men's Clothing	.50
R-6	The Construction Industry in Ohio	1.00

SPECIAL SERIES

X-1 Survey of Ohio Retail Dry Goods Advertising—Year 1924
X-2 Survey of Ohio Retail Clothing Advertising—Year 1924
X-3 Operating Results of Ohio Wholesale Grocers—Year 1923
X-4 Operating Results of Ohio Wholesale Grocers—Year 1924
X-5 Content of Advertising Courses in Colleges of Commerce—Agency Suggestions
X-6 Sales, Outstandings, and Advertising of Ohio Retail Dry Goods Dealers—Year 1925
X-7 Training for Retail Advertising
X-8 Operating Results of Ohio Wholesale Grocers—Year 1925

PROCEEDINGS OF MANAGEMENT WEEK, 1925

Office Management Section	$ .50
Production Section	.50
Marketing Section	.50
Accounting Section	.50
Proceedings of Management Week (all sections—cloth binding)	2.00